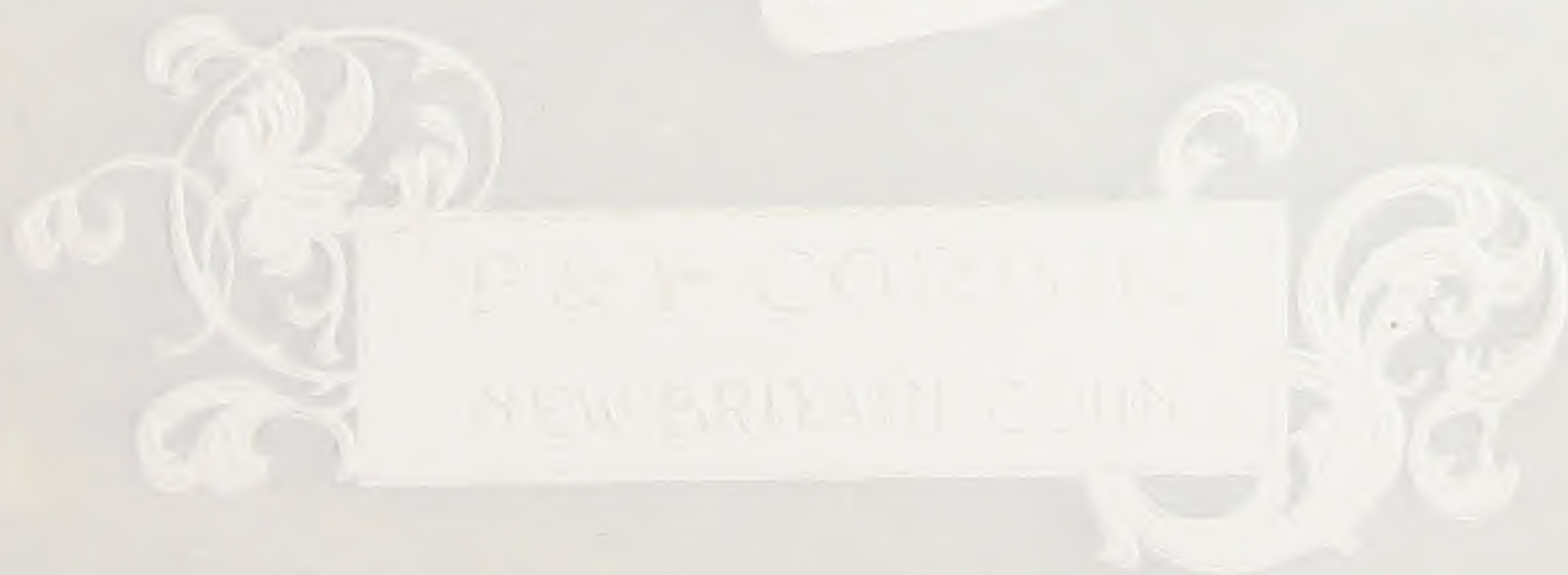
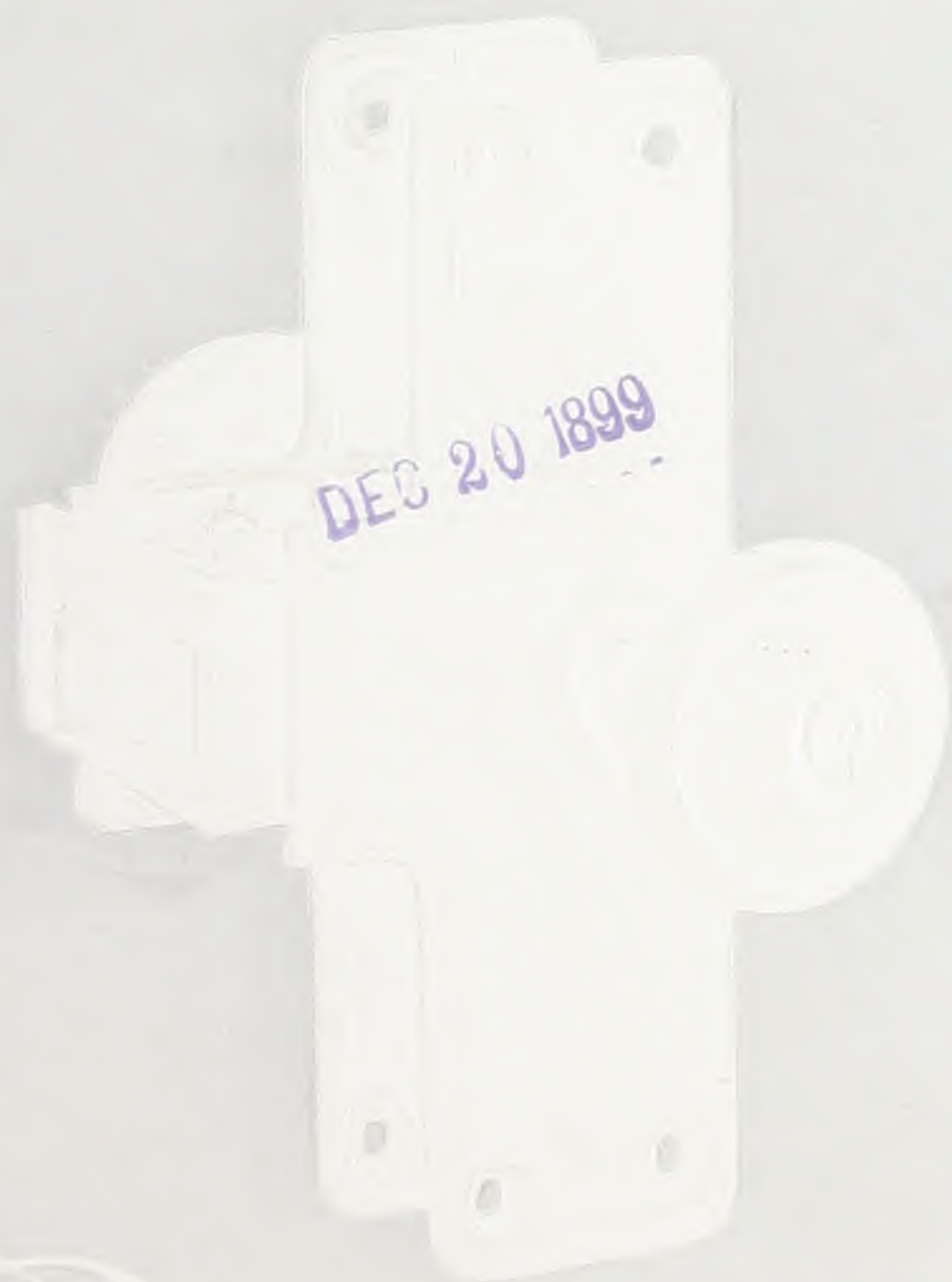


683.3 Corbin Locks Handmade

THE CORBIN



THE OREGON



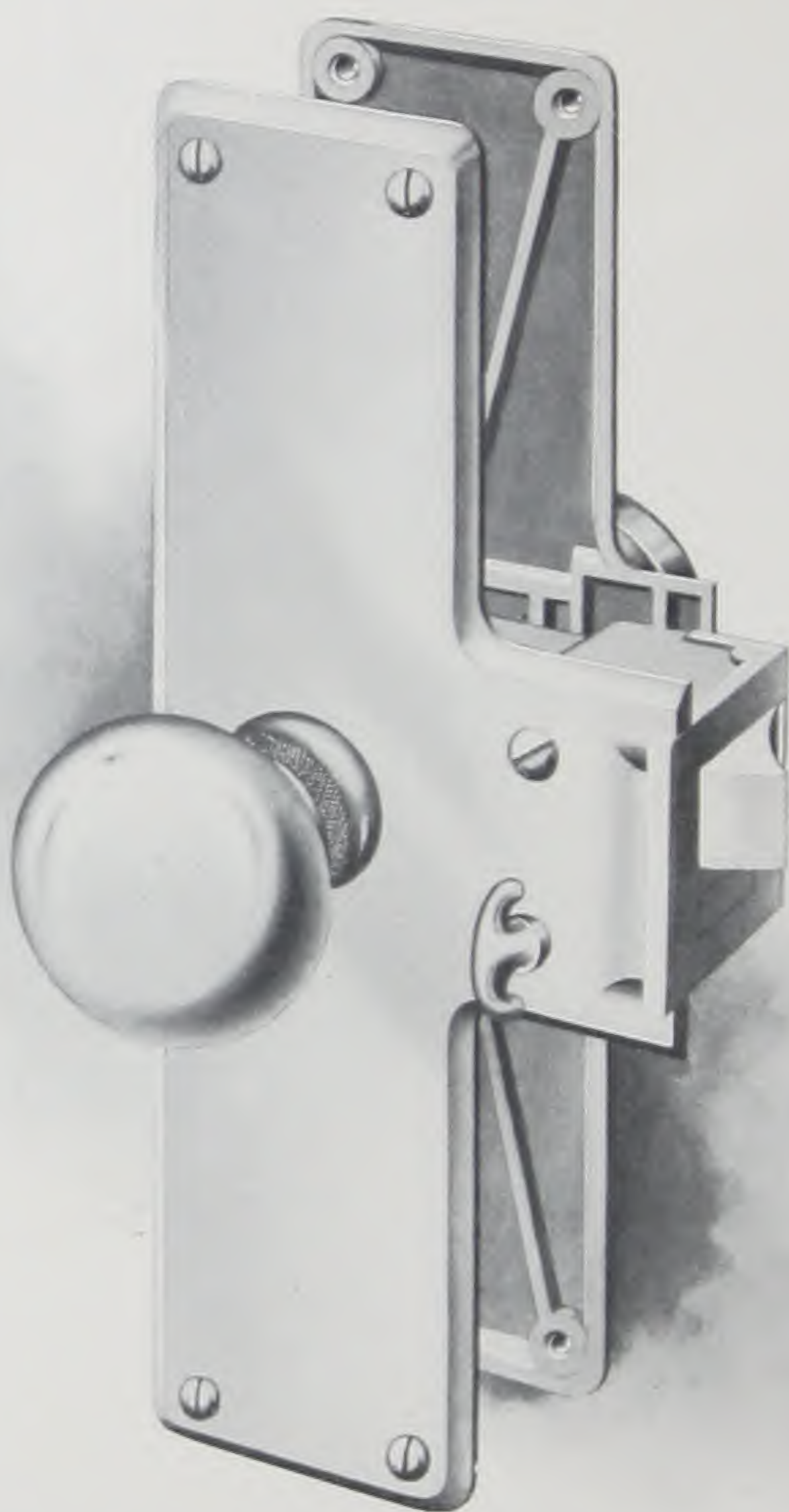
NEW YORK
JANUARY 1871
PUBLISHED BY
J. H. MASON & CO.
100 NASSAU ST.

THE CORBIN

A LOCK SET
ON THE
UNIT PLAN...

1899

P. & F. CORBIN
NEW BRITAIN
CONNECTICUT



THE CORBIN.

Front door lock, from inner side, showing locking collar on knob, swinging latch and dead bolt with thumb knob. Note the strength of the escutcheon.

THE CORBIN

A Door Lock on an Entirely New Principle

Of all the changes that modern invention has wrought in the manufacture of door locks, none are so far reaching in effect, so revolutionary in the new features introduced, as those embodied in the lock illustrated and described in these pages.

It is so radical a departure from all the ideas of lock building hitherto in vogue that it at once rivets the attention of those who see it, while its simplicity, strength, completeness, positive and easy action and distinctive and attractive design command instant favor. It is so different from other locks that it stands in a class by itself—so separate and distinct that it is at times difficult to find points for comparison with other locks made.

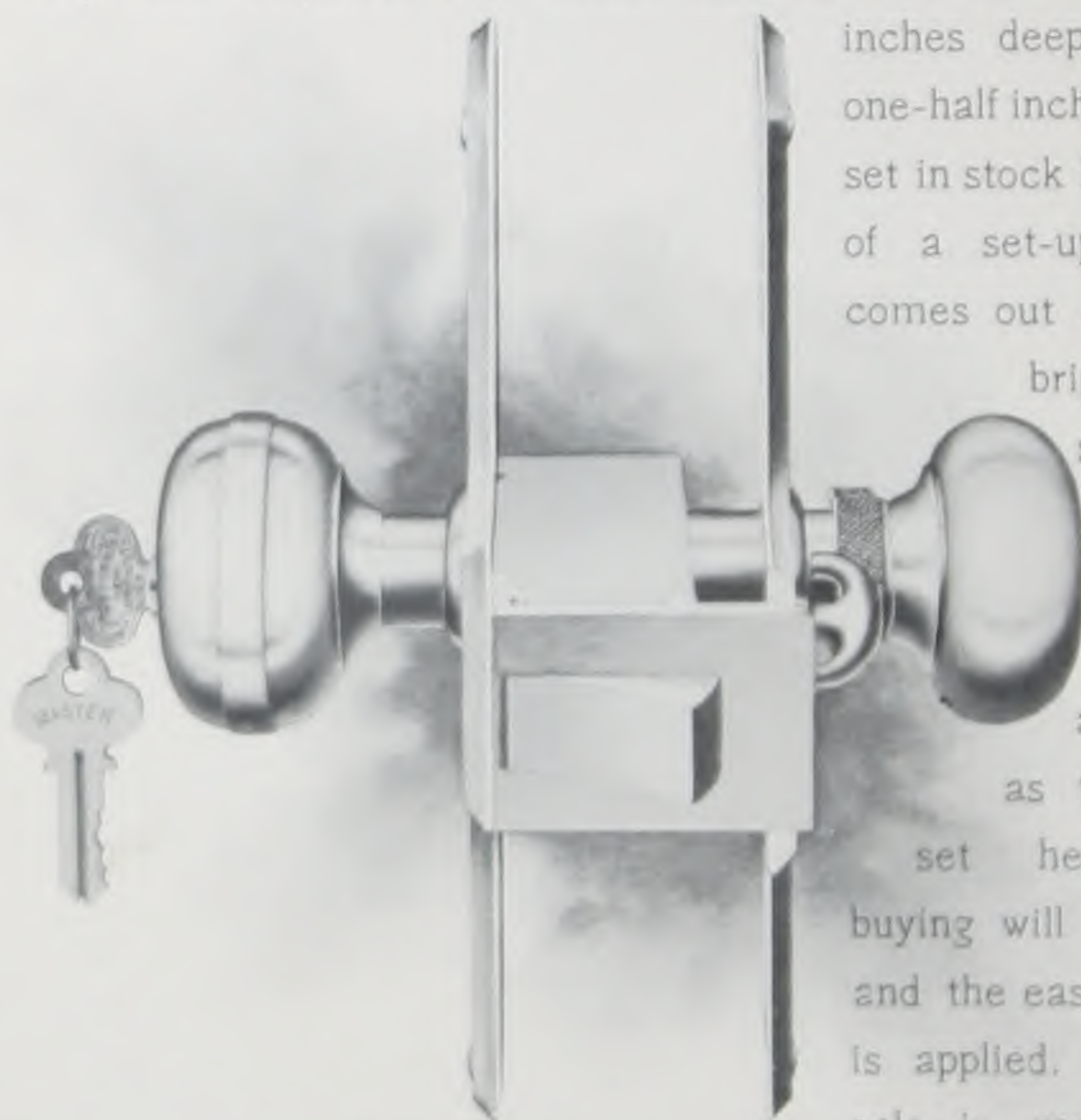
Each Set a Unit

The feature that is usually first mentioned, and the one that appeals most strongly to the hardware merchant, is that the sets are shipped assembled, just as they appear in use, with knobs and escutcheons attached. Each set is in its own box in the dealer's stock, perfectly adjusted, and there is no

ID 84-135050-11

danger of missing parts, lost in handling, either in the store or by carpenters, with the consequent loss and annoyance.

It is so easy to show the Corbin to prospective customers. The only outfit required is a model door, with a cut in the stile three



inches deep and one and one-half inches wide. Each set in stock has all the effect of a set-up sample, and comes out of its wrappings

bright and fresh, is

slipped into the

slot prepared

for it, and gives

the customer

an accurate idea

as to just how the

set he contemplates

buying will look and work,

and the ease with which it

is applied. And when the

sale is made, there is no

more trouble in fill-

ing the order than

in selling any other

kind of goods in

THE CORBIN.

Office door lock, showing position of key work on the outside, the locking collar and thumb piece on the inside; also the arrangement for adjustment to doors of different thickness by moving inside escutcheon along knob spindle.

full packages. Anybody given a memorandum of quantities and numbers can put up an order quickly, without liability of error or chance for confusion or annoying omissions.

Adjustable to Different Thicknesses

The handling of the Corbin is still further simplified by the fact that it is adjustable to different thicknesses of doors, one size fitting all doors from one and three-eighths inches to two inches in thickness, one for all doors thinner than one and three-eighths inches, and one for all thicknesses greater than two inches.

Easy to Attach

To the contractor, the ease with which the Corbin is applied is of special value. It is only necessary to saw from the stile of the door a piece three inches deep by one and a half inches in width, to slide the set just as received into the cut thus made, to tighten the machine screw that clamps the escutcheon against the side of the door, and to drive home four screws in each escutcheon. In the Bourne Office Building in New York City, which is equipped throughout with the Corbin, the workmen consumed but ten minutes in putting on each lock, and contractors figure the saving in this feature alone as one dollar for each. Any boy who can make a straight cut with a saw can do the work, as the skilled labor required in the fitting is all done at the factory, and there is no excuse for their not working properly. The carpenter can not, under any ordinary conditions, so attach the Corbin that its mechanism will bind or refuse to work. It requires no more time and less careful calculation to put on one of these locks than to attach a loose pin butt.

Its Construction

In the illustration showing the inner detail of the office lock, the thumb stop is "on," dead-locking the lock. If this were "off," the latch could be operated

by turning either knob. To lock the door, it is only necessary to give the collar on the inside a quarter turn, throwing the rollback nearest the outside into the slot shown, making the outer knob immovable. The latch can then still be operated by the inside knob and the other rollback, or from the outside by the key, which engages

this rollback by means of the locking spindle running through the knob spindles.

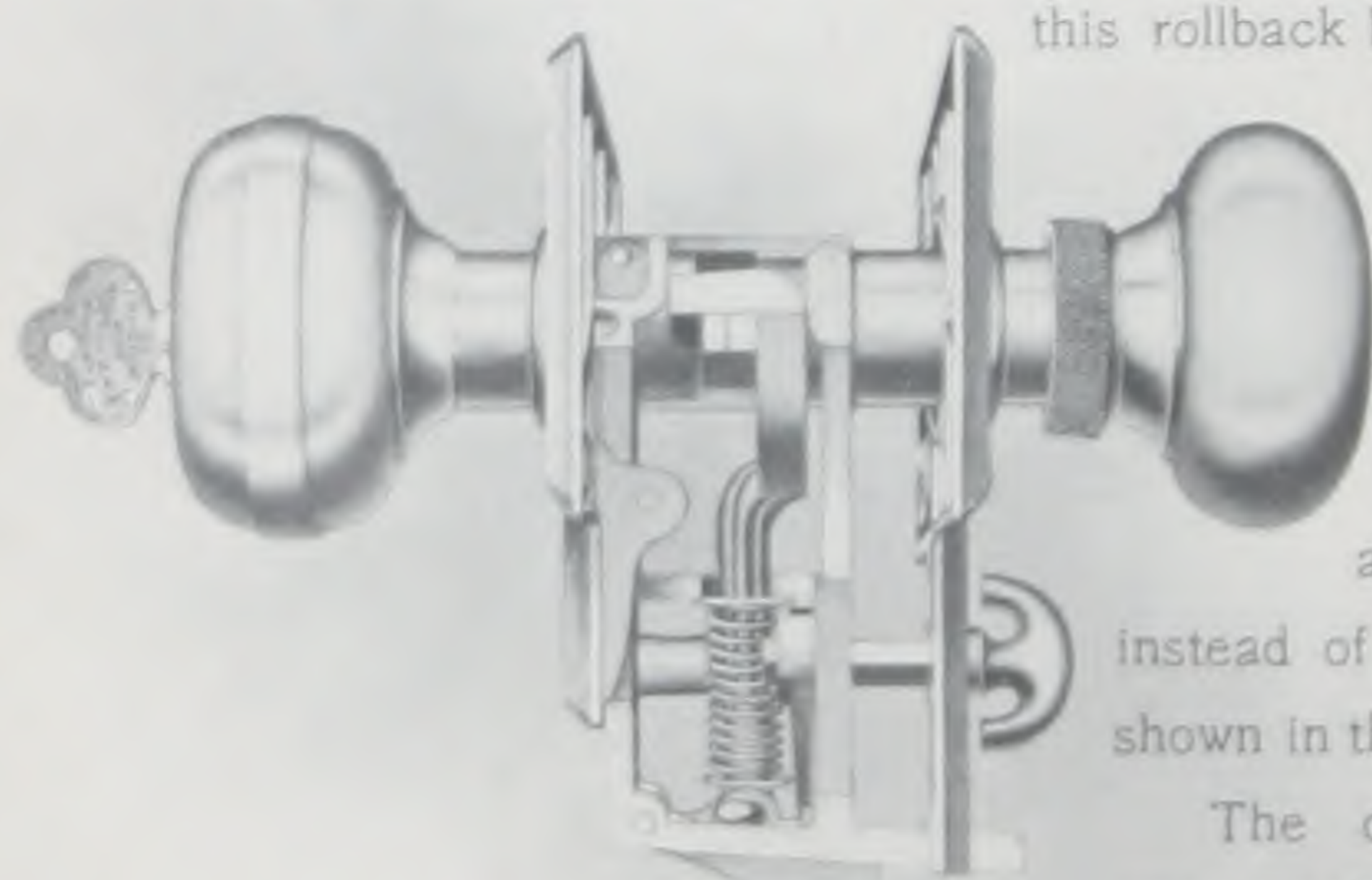
The front door lock has a dead bolt in addition to the latch, attached to a thumb knob, instead of the dead-locking device shown in this illustration.

The communicating lock has upon each side a thumb stop like that shown in the illustration,

so that each of the occupants of adjoining rooms can lock the door against intruders.

A closet lock has simply the

latch mechanism, with a knob on the outside only. A ship lock has a key action on each side, without the locking ring, and another pattern is similar but has a drop handle on the outside, for narrow passages. Bedroom locks, hotel locks, etc., show different



THE CORBIN.

Office door lock with jacket removed, looking from above. The two rollbacks in the center perform a double function, operating the latch and locking the door when manipulated by the collar on the inside knob.

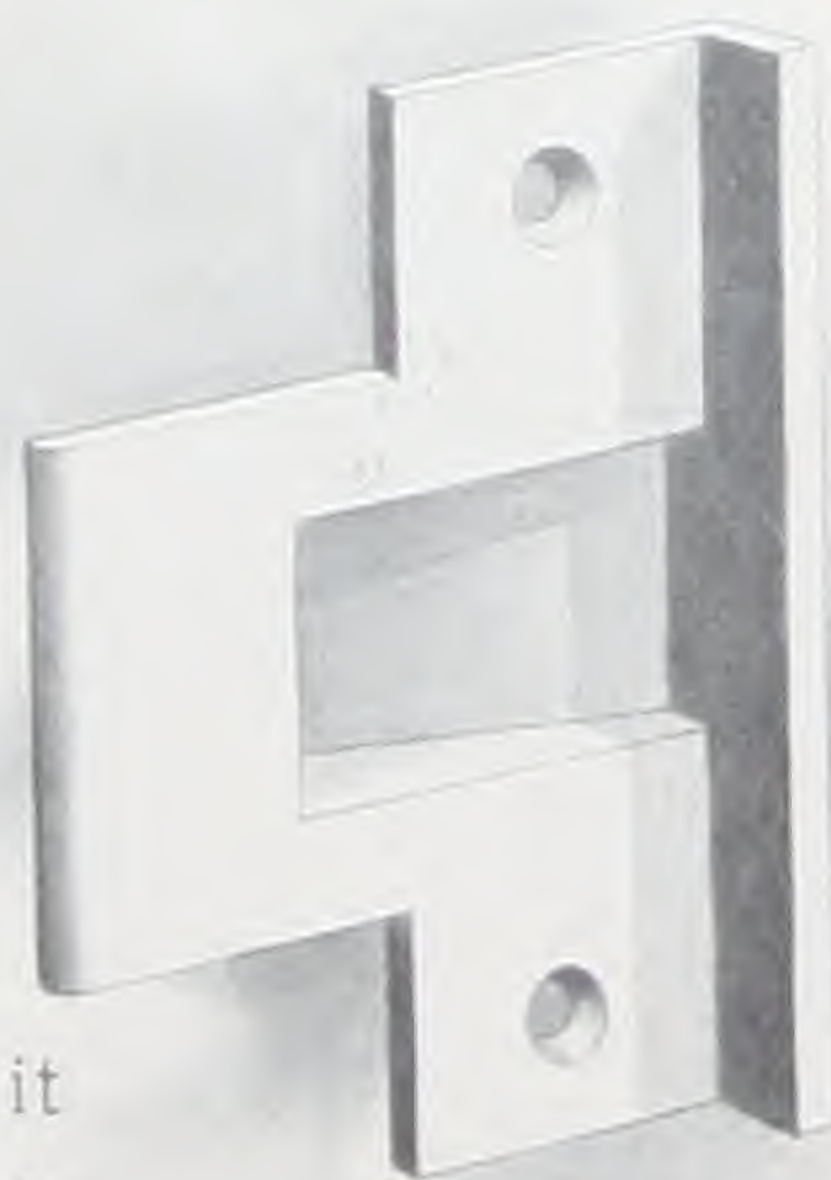
combinations of the same functions to suit the requirements of the places where they are used, and other patterns embodying variations of the principles employed will be added as need arises and occasion offers.

The Anti-Friction Latch

The unusual thickness of the lock, and the fact that its inside face is always the same distance from the outside of the door, permit the use of a hinged or swinging latch, a form that for easy action and anti-friction qualities has no equal, and which long ago would have come into popular use if the ordinary lock cases were not too narrow to accommodate it. With this latch, the door closes easily and smoothly and the impact of the latch with the strike is not felt. Its perfect action allows an easy spring to be used, requiring the minimum of pressure upon the knob.

The Strike

is the same for all locks, one uniform size answering for all thicknesses of doors. The lip at the outer edge is mortised into the stop, and the edge of the lock frame rests against it when the door is closed, rendering it impossible to insert anything from the outside to push back the latch. The indented portion of the strike is also protected by a brass backing, the cut in the door

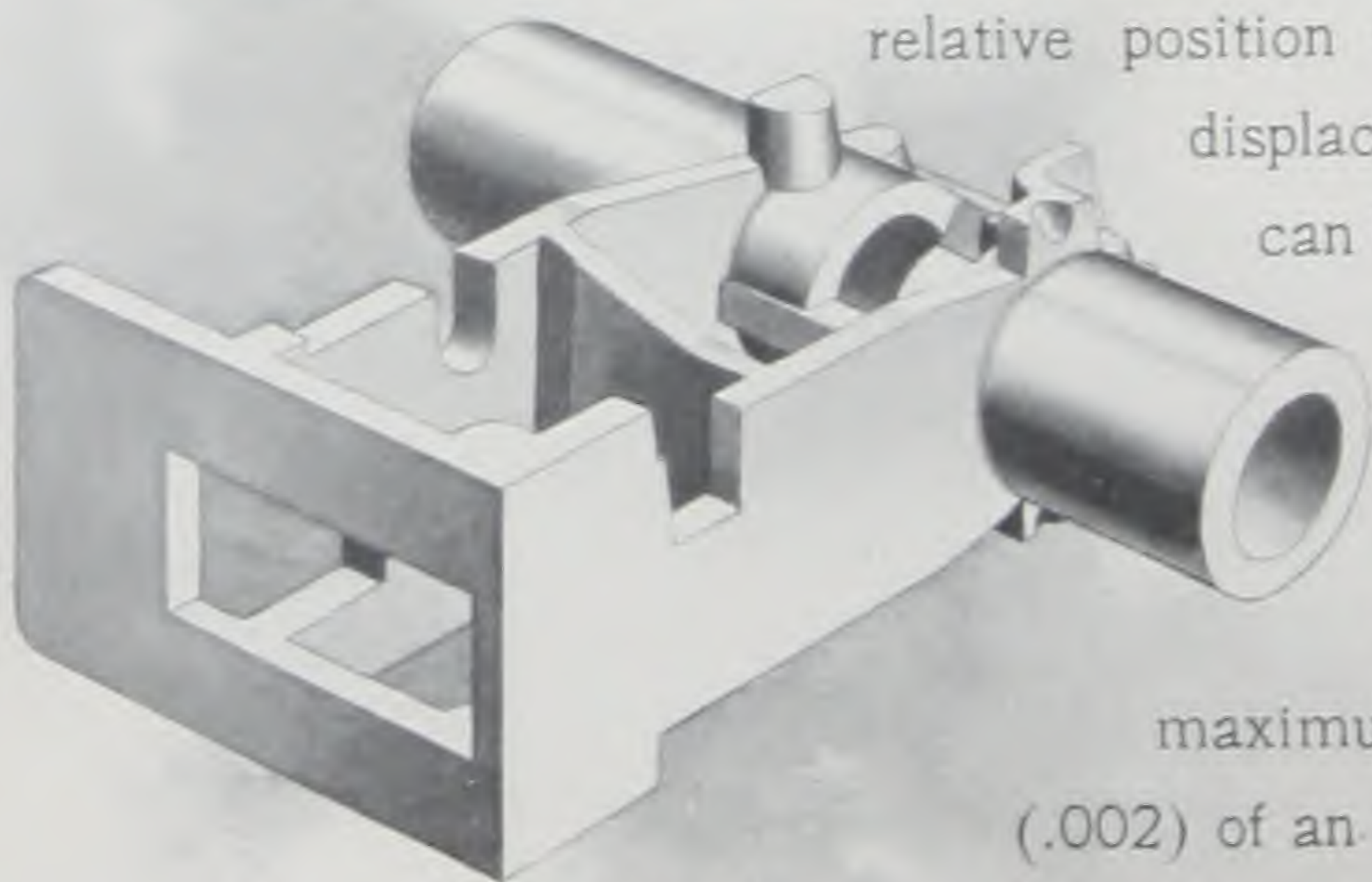


THE CORBIN.
Protected strike,
with lip and brass
backed latch
pocket.

frame not showing, thus obtaining a neat and finished appearance not otherwise possible. The distance from the lip of the strike to the top of the latch being the same in all instances, it is possible to accurately calculate the space required to accommodate the latch, so that the door is always tightly closed, and the shrinking or swelling of the wood does not in the least affect the fit.

Mechanically Perfect

It is easy to understand how, in a lock so constructed, set up by skilled workmen and sent out with all parts fitted, a very close adjustment of the mechanism is possible; and how, with a frame in one solid piece, holding all the parts and keeping them firmly in just the same relative position without any possibility of displacement, extreme accuracy can be employed in the making.



THE CORBIN.

The solid cast bronze frame, which holds all the other parts firmly in their proper place.

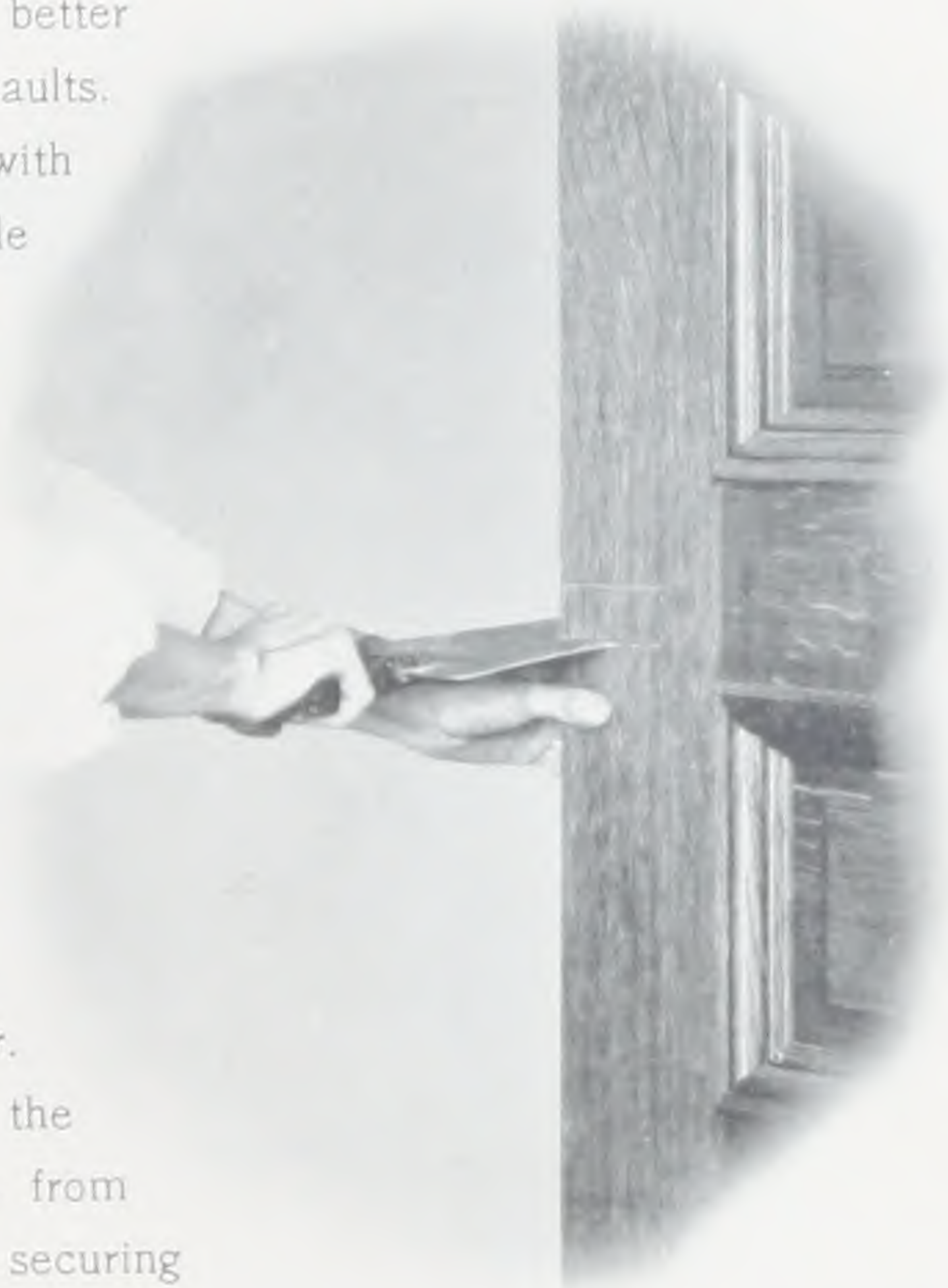
So closely, indeed, are the gauges set, that the play of the knobs in the frame is restricted to a maximum of two one-thousandths (.002) of an inch. In other words, the knob spindle along its entire length is but two one-thousandths of an inch smaller in diameter than the circular hole shown in the illustration of the frame through which it passes, and there is but the same amount of play where

the knobs rest against the frame. There is thus gained an ease and evenness of action and a firmness and solidity to the touch found elsewhere only in the better class of locks of safes and vaults.

The shape of the lock, with its roomy interior, giving ample space for the parts to work freely with the utmost simplicity of form and directness of motion also contributes to the easy firmness of its working.

There are no screws in the mechanism to bind or to work loose, the parts being held in place by four dowels and a spring cotter. Placing the key work in the knob is a radical departure from all previous arrangement, securing additional room for the latch mechanism, greater strength to the frame, and an adjustment of parts that is always

the same, no matter what the thickness of the door may be. The key hole is in the most prominent position possible, which is of particular advantage in flat keyed locks when placed in dim hotel corridors and in dark places.



THE CORBIN.

(From a photograph.)
Sawing the cut for the lock.

Simple

Look, if you will, at the illustration of the lock with the steel jacket removed. Note the fewness of the parts required—

a latch, a thumb-piece, two rollbacks, a solid cast frame, two escutcheons and two knobs, one having a cam at the end of a locking spindle that connects with the ball bearing pin tumbler cylinder in the other.

A light steel jacket springing into place covers the mechanism and completes the set. This is all there is to it, and yet there is not a function of any high grade door lock that these few parts will not perform with the highest degree of efficiency.



Strong

The thickness of the Corbin, and the simplicity of its construction

secure an unusual amount of solidity and strength. The frame, escutcheons, latch

and thumb-piece are heavy bronze castings.

The knob spindles are made from thick, seamless drawn brass tubing, and the

rollbacks are of wrought steel. The knob holding the locking cylinder is a strong and heavy casting. When attached to a door, the Corbin becomes so solid and rigid a part of it that the door is really stronger here than at any other point.

THE CORBIN.

(From a photograph.)

A door ready for the lock.

Secure

Its strength insures it against violence; its improved locking mechanism makes it proof against burglarious attempts. The escutcheon guards the side of the lock, and even with the screws removed, is fixed and immovable. The heavy cast frame covers and protects the knob spindle which must in turn be destroyed to get at the locking spindle.

The lip and the brass backing on the strike make it impossible to reach the latch. The knob housing and shielding the lock cylinder is very strong. The keyhole furnishes the only break in the invulnerable metal surface, and the impregnability of this portion of the lock is shown by the description of the cylinder in the pages that follow.



THE CORBIN.

(From a photograph.)

Front of door with lock attached.

Original

The inventor, Mr. Byron Phelps, holds eight United States patents

covering different new principles embodied in the Corbin, a fact which surely demonstrates its originality. Patents are now pending in Canada, England, Germany and France. It is an invention that logically follows an idea from its inception to its fullest development, complete in every detail, and cutting loose from all established precedent.

Its Development

The line is a new one. The pattern makers have barely finished work upon the initial designs and the first orders are nearing completion. The advent of the new invention has not been heralded in any way, but that portion of the general public interested in building has heard of it,



THE CORBIN.
(From a photograph.)
Side of door with lock
attached.

and it is to satisfy the demand for particulars that this statement concerning it is issued. The superiority of the Corbin is so obvious, the advantages so widespread, influencing alike dealer, contractor, architect, owner and tenant, that the demand all along the line will make its adoption imperative. The unit feature would alone secure its adoption; the swinging latch alone would do it; so would the adjustment to different thicknesses of doors — or its solidity and strength—or its improved locking mechanism. How sure, then, is it of finding universal favor when it combines all these winning features without a single deterrent quality which the most anxious search can discover!

Illustrations and Price Lists

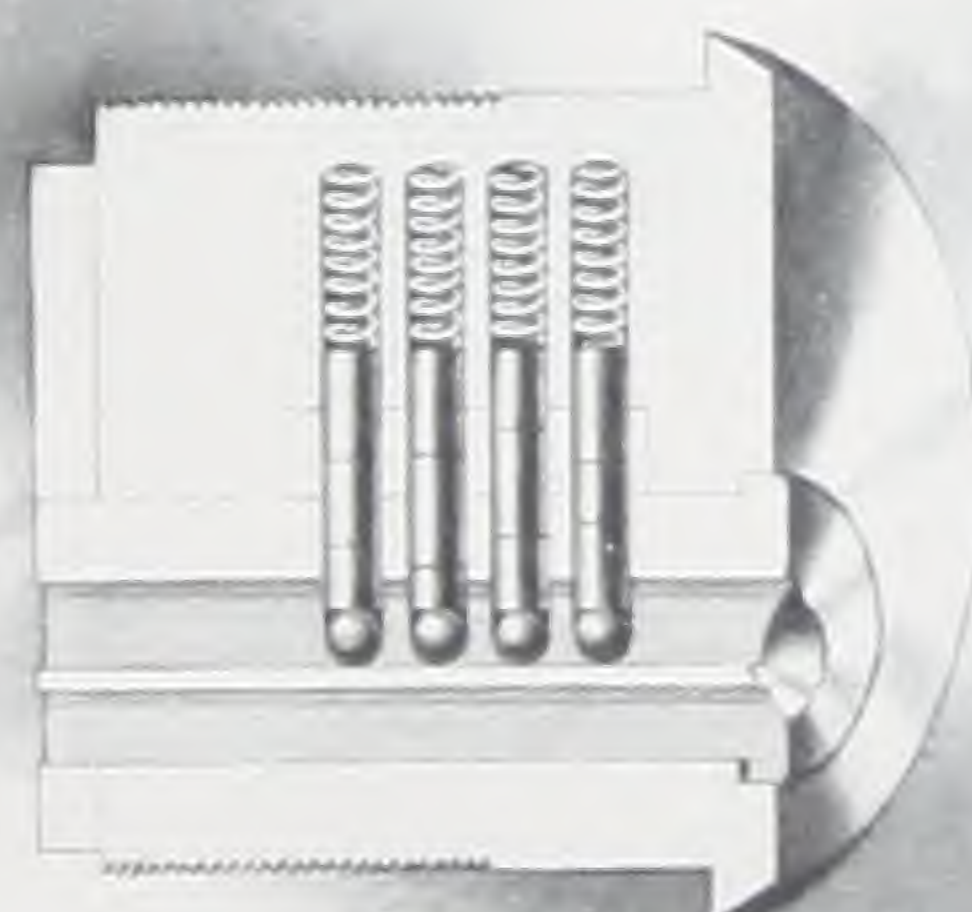
covering the line in detail are in course of preparation and will be distributed when ready.

THE BALL BEARING PIN TUMBLER LOCKING CYLINDER

Used in the Corbin Lock

There are two recent improvements in pin tumbler locking mechanism; one the strictly Corbin feature of the introduction of master keyed work into the same shell with the individual key, using the same key way and doing away with two separate cylinders where the master key is used, and the other the adoption of ball bearings. Both these features are to be found in the pin tumbler cylinders of P. and F. Corbin and the Corbin Cabinet Lock Company, and no other.

The illustrations show the form of a master keyed cylinder used in the fine door locks of the usual pattern. Other shapes have the same interior arrangement, but with the outer shell turned to fit the different places where it is to go. The Corbin lock, previously described, has this cylinder; so have fine cabinet, pad and trunk locks and a great variety of locks for special purposes, with three to six tumblers, with and without

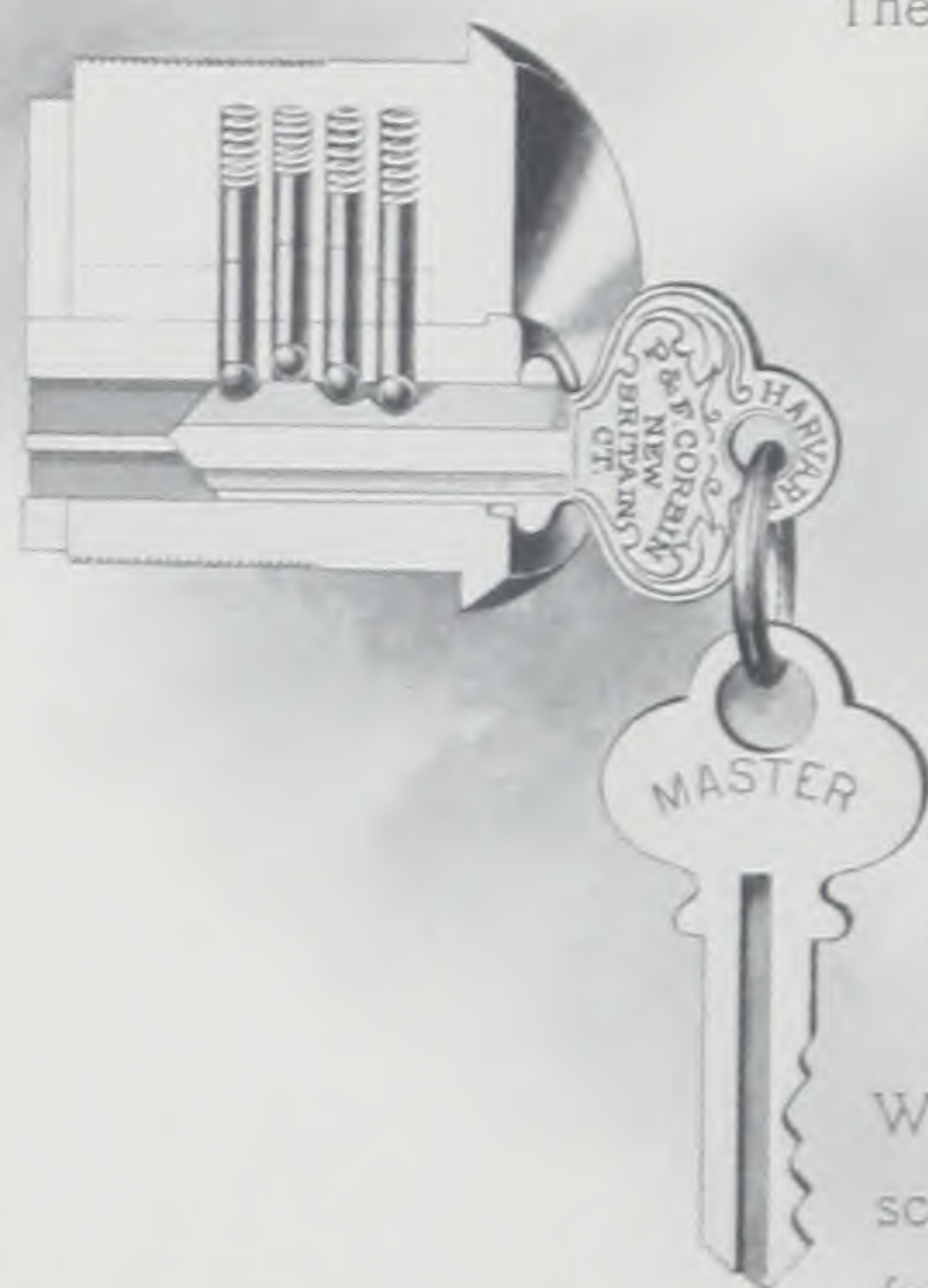


BALL BEARING PIN TUMBLER
CYLINDER.

(Patent applied for.)

Sectional view, with pins bolting together the shell, master cylinder and key plug.

master key, as may be desired, but all with the ball bearings.



BALL BEARING PIN TUMBLER CYLINDER.

(Patent applied for.)

Sectional view with individual key inserted, and pins still engaging the master cylinder.

The accompanying illustration shows the interior mechanism, the pins forming bolts that firmly engage both the central plug containing the key way and operated by the individual key, and the cylinder that surrounds it, operated by the master key belonging to the set. The tumbler pockets extend into the key way, a hardened steel, phosphor bronze or German silver ball reposing at the bottom of each, the center of a pin resting upon each ball. When the key is introduced as in the second cut, the balls receive the friction from the key and, turning easily, impart a directly upward motion to the pin instead of forcing it against the side of the pocket as is done when no ball bearings are used, with an increase in friction and wear.

The second illustration shows the lock with the individual key inserted. You will note that the breaks or divisions of the pins coincide with the outer surface of the key plug, permitting it to revolve when the key is turned, throwing the cam at the back that engages the latch or bolt and unlocking the door. The only key that will turn the plug alone is the one made for it, but when the master key is inserted it brings the other and higher divisions in the pins in line with the rim of

the master cylinder, causing both cylinder and plug to revolve and producing the same effect. When desired, the upper portions of the tumblers are again divided, so that a grand master key brings another combination of divisions into align with the master cylinder, and in this way it is possible for a tenant to have an individual key which will open only his own door, the janitor to have a master key that will open only the doors to the rooms where his work lies, and the owner a grand master key that will open any door at will. Hotel men find this feature of great advantage.

The keyhole is of irregular shape, the same conformation extending through the entire length of the key way, and requiring a key to fit it accurately. No flat key can be thrust into the lock, and it is equally proof against picking tools. The keys have slots milled along the sides to fit the pin guards on the key way, and the only key that can fit a cylinder of the Corbin manufacture is the one made for it.

The slightest appreciable variation in one of the wards of a key will make it useless. The key must raise all the pins to just the right height to release the locking mechanism, and it is a practical impossibility for anyone to open a door fastened by one of the Corbin pin tumbler locks without having the key to which it was fitted.

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